## ASSIGNMENT 3

Textbook Assignment: Chapter 3 - Roof Construction and Trim Carpentry

Chapter 4 - Exterior Finish of Walls

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- 3-1. Roof sheathing has what primary 3-6. purpose?
  - 1. Appearance
  - 2. Nailing base for shingles
  - 3. Insulation
  - 4. Tying rafters together
- 3-2. Composition roof sheathing should be laid in which of the following ways?
  - 1. Closed
  - 2. Open, horizontally only
  - 3. Open, diagonally only
  - Open, horizontally or diagonally
- 3-3. Board roof sheathing normally falls into which of the following categories?
  - 1. Matched tongue and groove only
  - 2. Shiplapped only
  - 3. Shiplapped and square edged only
  - 4. Any of the above
- 3-4. Tongue-and-groove boards used for closed sheathing must be supported by what minimum number of rafters?
  - 1. One
  - 2. Two
  - 3. Three
  - 4. Four
- 3-5. When you are determining the plywood thickness for roof sheathing, which of the following 3-10. factors should NOT be a consideration?
  - 1. Rafter spacing
  - 2. Weather conditions
  - 3. Insulating factor
  - 4. Type of roofing material to be used

- 3-6. In what direction relative to the rafters should the face grain of plywood sheathing run?
  - 1. Perpendicular
  - 2. Parallel
  - 3. Diagonal
- 3-7. When nailing 3/4-inch plywood sheathing to the rafters, what size nails should you use?
  - 1. 10d
  - 2. 8d
  - 3. 6d
  - 4. 4d
- 3-8. What is the purpose of the 2° bevel cut on the ends of plank roof decking?
  - 1. To allow for expansion
  - 2. To ensure a tight face joint
  - 3. To ensure space for adjustment
  - To allow for quicker installation
- 3-9. What length should nails should you use for fastening plank decking?
  - 1. Twice the nominal plank thickness
  - 2. Three times the nominal plank thickness
  - 3. Three and one-half times the nominal plank thickness
  - 4. Four times the nominal plank thickness
- 3-10. Roof decking extending beyond a gable-end wall should span at least how many rafters?
  - 1. One
  - 2. Two
  - 3. Three
  - 4. Four

- 3-11. Butt joints of plywood sheets should be alternated so they do not occur on the same rafter.
  - 1. True
  - 2. False
- 3-12. What is the recommended clearance between masonry and wood framing members at a chimney?
  - 1. 1 in.
  - 2. 2 in.
  - 3. 3 in.
  - 4. 4 in.
- 3-13. Which of the following wood characteristics is least important when selecting trim material?
  - 1. Knots
  - 2. Even grain
  - 3. Natural decay-resistance
  - 4. Preservative pretreatment
- 3-14. For exterior trim fasteners, which of the following types of screws or nails is/are preferred?
  - 1. Galvanized steel only
  - 2. Stainless steel only
  - 3. Aluminum only
  - 4. All of the above
- 3-15. What part of a gable roof projects beyond the end wall on an upward slope?
  - 1. Rake
  - 2. Eave
  - 3. Fascia
  - 4. Ledger
- 3-16. On a roof with no overhang, what type of cornice is normally used?
  - 1. Open
  - 2. Gable
  - 3. Closed
  - 4. Simple
- 3-17. In closed-cornice construction, the underside of the eaves is exposed.
  - 1. True
  - 2. False

- 3-18. Which of the following components provides a nailing base for soffit material?
  - 1. Lookout
  - 2. Frieze board
  - 3. Rafter
  - 4. Plancier
- 3-19. Wood soffit panels should be fastened using nails in what (a) size and (b) spacing?

  - 1. (a) 6d (b) 6 in.
  - 2. (a) 6d (b) 8 in.
  - 3. (a) 4d (b) 8 in.
  - 4. (a) 4d (b) 6 in.
- 3-20. What problem occurs when galvanized nails are used with aluminum sheet metal?
  - 1. Spalling
  - 2. Electrolysis
  - 3. Rusting
  - 4. Peeling
- 3-21. What is the area of a shingle that is not over-lapped called?
  - 1. Top lap
  - 2. Exposure
  - 3. Square
  - 4. Coverage
- 3-22. Which of the following expressions is correct concerning the pitch of a roof with a 6-inch-per-foot rise and a 32-foot span?
  - 1. 1/8
  - 2. 1/4
  - 3. 1/2
  - 4. 3/16
- 3-23. Using roofing felt over sheathing has what primary purpose(s)?
  - To provide a secondary barrier against wind-driven rain only
  - 2. To keep the sheathing dry until shingles are applied only
  - To protect shingles against the effects of resinous materials released from the sheathing only
  - 4. Each of the above

- 3-24. required to cover 48,400 square feet?
  - 1. 121
  - 2. 242
  - 3. 363
  - 4. 484
- Which of the following materials 3-25. should be used as an underpayment?
  - 1. Coated felt
  - 2. Laminated waterproof paper
  - 3. Asphalt-saturated felt
  - 4. Polyethylene sheets
- 3-26. Along cave lines where ice dams might occur, what type of roofing material is recommended?
  - 1. 15-lb felt
  - 2. 30-lb felt
  - 3. 55-lb mineral surface
  - 4. 55-lb smooth surface
- 3-27. Forty-two and one/third squares of strip shingles are contained in how many bundles?
  - 127 1.
  - 381 2.
  - 3. 609
  - 4. 1,143
- When applying asphalt shingles, how 3-28. far past the drip edge should you extend the first course to prevent water from backing up under the shingles?
  - 1. 1 in.
  - 2. 5 in.
  - 3. 5/8 in.
  - 4. 1/4 in.
- 3-29. Flashing has what primary purpose(s)?
  - 1. Reflect heat only
  - 2. Protect against water seepage only
  - 3. Both 1 and 2 above
  - 4. Act as a vapor barrier

- How many rolls of 30-pound felt are 3-30. The concealed nailing method of installing roll roofing is used when maximum service life is required.
  - 1. True
  - 2. False
  - 3-31. A 24-inch-long wood shingle on a roof with a 1/4 pitch should have what maximum exposure?
    - 1. 5 in.
    - 2. 5 1/4 in.
    - 3.  $5 \frac{3}{4} in$ .
    - 4. 7 1/2 in.
  - 3-32. What is/are the primary difference(s) in the installation of wood shakes and wood shingles?
    - 1. Shorter nails are used with wood shingles only
    - 2. Shingles have less exposure only
    - 3. An underpayment between each course of shakes only
    - 4. All of the above
    - What is the most common type of 3-33. ridge used on asphalt shingle roofs?
      - 1. Boston
      - 2. Sheet metal
      - 3. Tile
      - 4. Prefabricated
    - 3-34. Roofing asphalts are graded on what characteristic?
      - 1. Color
      - 2. Weight per pound
      - 3. Temperature at which they begin to flow
      - 4. Temperature at which they begin to soften
    - In built-up roofing, which of the 3-35. following types of felts should be used?
      - 1. Organic only
      - 2. Glass fiber only
      - 3. Glass fiber and asphalt only
      - 4. Any of the above

- 3-36. What is the main purpose of using felt paper on a built-up roof?
  - 1. To hold the bitumens together
  - 2. To insulate
  - 3. To soak up excess asphalt
  - 4. To act as a vapor barrier
- 3-37. Asphalt should be in what temperature range when applied?
  - 1. 275°F to 375°F
  - 2. 375°F to 425°F
  - 3. 450°F to 500°F
  - 4. 500°F to 550°F
- 3-38. The aggregate on a built-up roof serves which of the following functions?
  - 1. Protect the bitumen from sunlight only
  - Increase wind and fire resistance only
  - 3. Permit use of a thick surface coating of bitumen only
  - 4. Each of the above
- 3-39. The first two layers of a five-ply roof are referred to as what type of nailer?
  - 1. Dry
  - 2. Base
  - 3. Bottom
  - 4. Back
- 3-40. A kettle operator should perform what task first?
  - 1. Fill the fuel tank
  - Fill the kettle with pieces of asphalt
  - 3. Inspect the kettle, making sure it is dry inside
  - 4. Light-off the kettle
- 3-41. In a kettle, how should you' maintain hot binder at an even temperature?
  - 1. Adjust the burner
  - Add material at the same rate as the melted material is drawn off
  - 3. Adjust the fuel pressure
  - 4. Remove material faster than you add it

- 3-42. If a kettle catches fire, which of the following is an action you should take first?
  - 1. Remove the burner
  - 2. Shut off the fuel
  - 3. Spray water on the kettle
  - 4. Close the lid
- 3-43. The distance maintained between the mopper and the felt layer should not exceed
  - 1. 9 ft
  - 2. 7 ft
  - 3. 3 ft.
  - 4. 5 ft
- 3-44. Which of the following properties is/are essential for wood siding?
  - 1. Weathers easily
  - 2. Paints easily only
  - 3. Works easily only
  - 4. Paints and works easily
- 3-45. Which of the following horizontal sidings can be obtained with either shiplap or tongue-and-groove edges?
  - 1. Drop
  - 2. Bevel
  - 3. Dolly Varden
- 3-46. In the installation of vertical board siding, board widths range from 2 to 4 inches.
  - 1. True
  - 2. False
- 3-47. When installing 4- by 8-foot vertical plywood siding, which of the following materials should you apply to the joints to ensure maximum watertightness?
  - 1. Battens only
  - 2. Caulking only
  - 3. Water-repellent preservative and caulking only
  - 4. Any of the above

- 3-48. siding should line up with which of the following parts?
  - 1. Drip caps of the doors and windows only
  - 2. Bottoms of doors and windows
  - 3. Drip caps and bottoms of doors and windows
  - 4. Sides of doors and windows
- 3-49. When wood siding has a natural finish, what type of nail should you use?
  - 1. Aluminum only
  - 2. Stainless steel only
  - 3. Aluminum or stainless steel
  - 4. Galvanized
- 3-50. What distance usually determines the average exposure of horizontal siding?
  - 1. Underside of the windowsill to
  - 2. Bottom of the windowsill to the foundation wall
  - 3. Bottom of the door to the drip cap of the door
  - 4. Bottom of the door to the bottom of the windowsill
- What should be the exposure of 3-57. 8-inch siding installed on a building where the overall height of the windows is 68 inches?
  - 1. 5 7/8 in.
  - 2. 6 in.
  - 3. 6 3/16 in.
  - 4. 6 7/8 in.
- The first installed course of bevel siding is usually blocked out with which of the following items?
  - 1. Fridging
  - 2. Flashing
  - 3. A starter strip
  - 4. A batten

- To present a uniform appearance, 3-53. How should siding that returns against a roof surface, such as a dormer, be joined?
  - 1. Mitered corners
  - 2. Metal corners
  - 3. Flashing
  - 4. Corner boards
  - 3-54. When applying wood shingles where the "siding effect" is not a consideration, what spacing should you use to allow for expansion during rainy weather?
    - 1. 1/16 to 1/8 in.
    - 2. 1/8 to 1/4 in.
    - 3. 1/4 to 1/2 in.
  - 3-55. Flashing should be used in a structure where rain or melted snow penetration is possible.
    - 1. True
    - 2. False
  - the top of the window drip cap 3-56. A 24-foot gutter run should have what pitch?
    - 1. 1 7/8 in.
    - 2.  $1 \frac{3}{4} in$ .
    - 3. 1 1/2 in.
    - 4. 1 5/16 in.
    - Full height vertical members of a panel door are known by what term?
      - 1. Muntins
      - 2. Rails
      - 3. Stiles
      - 4. Runners
    - 3-58. An exterior door made of thin plywood faces over a wood framework with a particle board core is what type?
      - 1. Panel
      - 2. Flush
      - 3. Combination
      - 4. Clad

- 3-59. A main entrance door is normally 3-65. what size?
  - 1. 1 1/2 in. thick, 2 ft 8 in. wide, 6 ft 8 in. high
  - 2. 1 3/4 in. thick, 3 ft 0 in. wide, 6 ft 8 in. high
  - 3. 1 3/4 in. thick, 2 ft 8 in. wide, 6 ft 8 in. high
  - 4. 1 3/4 in. thick, 3 ft 0 in. 3-66. wide, 7 ft 0 in. high
- 3-60. Securing a doorframe to the framing members requires what nail
  - (a) size and (b) type?
  - 1. (a) 16d (b) casing
  - 2. (a) 12d (b) common
  - 3. (a) 10d (b) finish
  - 4. (a) 8d (b) duplex
- 3-61. Where on each side of a jamb should 3-67. shims be located?
  - 1. Bottom only
  - 2. Bottom and top only
  - 3. Center only
  - 4. Bottom, top, and center
- 3-62. Heat loss through metal window frames is less than through wood window frames.
  - 1. True
  - 2. False
- 3-63. The small wood members that separate the lights in a sash are known by what term?
  - 1. Meeting rails
  - 2. Parting beads
  - 3. Muntins
  - 4. Weather strips
- 3-64. Which of the following windows has a wood sash with a single large light?
  - 1. Casement
  - 2. Double hung
  - 3. Hopper
  - 4. Stationary

- 3-65. What advantage does a casement window have over a double-hung window?
  - 1. Provides more light
  - 2. Provides better insulation
  - 3. Provides better ventilation
  - 4. Is easier to install
- 3-66. What feature best distinguishes sheet glass from plate glass?
  - Plate glass is polished flat on both sides
  - 2. Color
  - 3. Thickness
  - 4. Only plate glass is manufactured in a continuous ribbon and then cut in large sheets
- 8-67. Because of its high rate of expansion, what type of glass requires the most careful cutting, handling, and glazing?
  - 1. Laminated
  - 2. Wired
  - 3. Tempered
  - 4. Heat absorbing
- 3-68. Which of the following types of glass should be used where the hazard of flying glass must be avoided?
  - 1. Wire
  - 2. Laminated
  - 3. Insulating
  - 4. Safety
- 3-69. When cutting glass, what allowance should you deduct from the measurements to allow for expansion?
  - 1. 1/16 in.
  - 2. 1/8 in.
  - 3. 3/16 in.
  - 4. 1/4 in.

- 3-70. What is the required minimum equipment needed to cut glass efficiently?
  - A glass cutter and straightedge only
  - 2. A glass cutter and tape measure only
  - A glass cutter, straightedge, flat solid table, and tape measure
  - A glass cutter, straightedge, and a honing stone
- 3-71. When scoring glass, you should use what minimum number of strokes?
  - 1. One
  - 2. Two
  - 3. Three
  - 4. Four
- 3-72. Which of the following types of sash should be primed before glazing?
  - 1. Old and new metal sash only
  - 2. Old and new wood sash only
  - 3. Both 1 and 2 above

- 3-73. What is the primary purpose of putty used in glazing?
  - 1. To make a weathertight joint
  - 2. To hold the glass in the sash
  - 3. To improve the appearance
  - 4. To reduce glass expansion
- 3-74. When you are mounting wire glass in a small wooden window frame, what should be the first step?
  - Insert the glass into the window frame with the wire twist in the vertical position
  - 2. Lay a continuous 1/6-in.-thick bed of putty in the putty run
  - Insert the glass into the window frame with the concave side facing out
  - 4. Lay a continuous bead of putty against the perimeter of the glass
- 3-75. To clean glass after glazing or painting, what material should you use?
  - 1. Ammonia
  - 2. Mineral spirits
  - 3. Caustic soap
  - 4. Acid solution